

ANTS (*CREMATOGASTER CLARA* MAYR) NESTING IN BIRD BOXES (HYMENOPTERA: FORMICIDAE)¹

Wayne H. Davis², William C. McComb³, Pierre Allaire⁴

ABSTRACT: Ants (*Crematogaster clara* Mayr) occupied bluebird boxes on metal posts posted in reclaimed coal mines. Eggs, larvae and pupae were found covering the floor of one of the boxes.

On April 8, 1982, we established 50 stations of experimental bluebird houses on reclaimed surface mines of Falcon Coal Co., near Quicksand, Breathitt Co., KY. At each station 3 boxes were bolted to a board fastened between two standard 1.8 m iron fence posts. The boxes, made of planed, untreated yellow-poplar (*Liriodendron tulipifera*), had inside dimensions of 13 cm x 13 cm and a height of 25 cm. One type was the standard bird house with a circular entrance 38 mm in diameter located 20 mm below the roof. A second type had the front panel reaching to within 38 mm of the roof leaving an entrance space of 38 x 130 mm. The third type had a similar entrance in the roof made by having the roof come within 38 mm of the front panel. The roof of each type was easily removed for inspection. Each station was visited weekly throughout the summer.

Ants, identified as *Crematogaster clara* Mayr by James C. Trager and William F. Buren, began entering the boxes by May 15. In succeeding weeks more boxes were occupied until 8 stations finally came to be utilized by ants. The ants were apparently exploratory swarms. There were no crevices or cavities in the wood that seemed suitable for colonizing by ants. There was no nesting material in any of the boxes used by ants. This exploratory behavior continued through the next month.

On July 15 ant eggs were found on the floor in 3 of the boxes. On August 3 the entire floor of one box was covered with eggs, larvae and pupae.

The 3 box types varied in exposure to light and elements with the circular entrance type having the least exposure and the top entrance type the most. Ants preferred the most sheltered type, but at 3 stations all 3 types were occupied and ant eggs were found on the floor in both the circular entrance and the front slot entrance type.

We know of no instances of ants nesting in situations such as we have described. Ants that nest above ground generally choose crevices with

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²School of Biological Sciences, University of Kentucky, Lexington, KY 40506

³Dept. of Forestry, University of Kentucky, Lexington, KY 40546

⁴Dept. of Science & Mathematics, Lees Junior College, Jackson, KY 41339

small openings to maintain humidity and to dampen temperature fluctuations (Sudd, 1967). *Solenopsis* sp. and *Monomorim minimum* (Buckley) have been reported entering bluebird boxes and devouring young nestlings (Laskey, 1940; Hurst 1980).

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LITERATURE CITED

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- Laskey, A.R. 1940. The 1939 Nesting Season of Bluebirds at Nashville, Tennessee. Wilson Bull. 52: 183-190.
- Sudd, J.H. 1967. An introduction to the Behavior of Ants. Edward Arnold Publ., London. 200 pp.

SOCIETY MEETING OF NOVEMBER 16, 1983

The second meeting of the 1983-84 year was held on Wednesday evening at the Academy of Natural Sciences, Philadelphia. Eleven members and two guests heard Joseph M. Harrison speak on "Mounting Insects in Transparent Media."

Mr. Harrison described the history of transparent mounts, which date back to the 2-sided glass "book type" mounts of Titian Peale (ca. 1830), the popular 2-sided glass mounts sold on a large scale by the Dentons (ca. 1890-1925), the familiar "Riker" mounts, and finally, his own acrylic mounts. Many examples of various types of mounts were on display, and samples were passed around the audience for examination. The "Harrison" mounts have a transparent 1/8" acrylic top and bottom, and opaque acrylic sides, and provide excellent sample visibility without the much greater weight and fragility of glass. Polyurethane foam sheeting provides an attractive backing material, but discolors if exposed to sun or artificial light for extended periods. Cotton batting can be substituted in the latter situations. Use of a stainless steel pin through the insect's body during the spreading process allows the pin to be more easily removed before the insect is placed in the mount. Injection of an insecticide solution into the insect's body is recommended to prevent future dermestid attacks.

Numerous practical hints on field methods were also provided by Mr. Harrison. He prefers lighter fluid as a killing agent, injected hot water as a relaxant, and flea collars worn around the lower pantlegs as a tick and chigger deterrent.

Mrs. Mildred Morgan, office secretary of the Society, was presented with an attractive butterfly mount by Mr. Harrison for her conscientious service.

Wm. H. Day